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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/981,444	10/17/2001	Graham Taylor	0476-2044.1	5834
23644 7590 07/11/2008 BARNES & THORNBURG LLP P.O. BOX 2786 CHICAGO, IL 60690-2786				
EXAMINER CHOUDHURY, AZIZUL Q				
ART UNIT		PAPER NUMBER		
2145				
NOTIFICATION DATE		DELIVERY MODE		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patent-ch@btlaw.com

Office Action Summary

Application No.

09/981,444

Applicant(s)

TAYLOR ET AL.

Examiner

AZIZUL CHOUDHURY

Art Unit

2145

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 March 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10, 18-20 and 22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 18-20 and 22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/C)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

Detailed Action

This office action is in response to the correspondence received on March 7, 2008.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 19, 20 and 22 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 19, 20 and 22 fail to fall within a statutory category of invention. It is directed to the program itself, not a process occurring as a result of executing the program, a machine programmed to operate in accordance with the program nor a manufacture structurally and functionally interconnected with the program in a manner which enables the program to act as a computer component and realize its functionality. It's also clearly not directed to a composition of matter. Therefore, it's non-statutory under 35 USC 101.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 19, 20 and 22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to

Art Unit: 2145

which it pertains, or with which it is most nearly connected, to make and/or use the invention. The claims cite a computer-readable medium however the specifications fail to support such a feature. Appropriate corrections are required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-10, 18-20 and 22 are rejected under 35 U.S.C. 102(e) as being anticipated by Rajarajan et al (US PG PUB No: US 20020120784A1), hereafter referred to as Rajarajan.

1. With regards to Claims 1, 19, 20 and 22 the Rajarajan discloses: A method of generating an adaptive software interface for at least two networked entities, the method comprising: generating structured meta-data providing at least one semantic information element describing a characteristic of each said entity *(Equivalent to data structures such as the database record set; see paragraph 38, Rajarajan. In addition, various uses of data structures are supported within*

Rajarajan's design; see paragraphs 17, 19, 22 and claim 4, Rajarajan. Also refer to paragraph 53, Rajarajan); collating the semantic information elements of each said entity where possible with corresponding semantic information elements of said at least one other entity (see paragraphs 59 and 61-63, Rajarajan); and analyzing said collated semantic information elements to establish the extent to which the interface capabilities of said at least two networked entities are compatible and generating in accordance with said established compatibility the adaptive software interface for the two entities (Rajarajan's design teaches how servers are checked to ensure they have proper interfaces with one another; see paragraphs 66-68; Rajarajan).

2. With respect to Claim 2, the Rajarajan discloses a protocol where entities exchange interfaces via a so-called Lookup Service, thus disclosing: wherein the step of collating occurs dynamically during a preliminary exchange between the two entities prior to an interface being established between the two entities *(equivalent to the initializing of the libraries; see paragraph 57, Rajarajan).*
3. With regards to Claim 3, the Rajarajan discloses said structured meta-data includes associated meta-data for at least one said semantic information element *(see paragraph 53, Rajarajan).*

4. With regards to Claim 4, the Rajarajan discloses the semantic information element describing the characteristics of said adaptive interface is provided in said meta-data in a form independent of the version of software used to generate said metadata (*see paragraph 53, Rajarajan*).
5. With regards to Claim 5, the Rajarajan discloses semantic information compiled into classes by a Java compiler, thus disclosing: wherein said semantic information element is generated by a compiler receiving input data from an interface description and a code template (*see paragraph 40, Rajarajan*).
6. With regards to Claim 6, the Rajarajan discloses said interface description includes a model of the data to be communicated across the interface and a code template (*see paragraph 50, Rajarajan*).
7. With regards to Claim 7, the Rajarajan discloses a protocol that initially registers entity descriptions and interfaces, thus disclosing: wherein said semantic information element provided by said meta-data has a form which can be mapped to an appropriate transport layer and exchanged between said networked entities prior to a higher level interface being established between said networked entities (*equivalent to the initializing of the libraries; see paragraph 57, Rajarajan*).

8. With respect to Claim 8, the Rajarajan discloses: generating meta-data providing a structure containing at least one semantic information element describing a characteristic of the first entity; generating meta-data providing a structure containing at least one semantic information element describing a characteristic of the at least one other entity (*Equivalent to data structures such as the database record set; see paragraph 38, Rajarajan. A set of records is equivalent to the claimed more than one meta-data providing a structure. In addition, various uses of data structures are supported within Rajarajan's design; see paragraphs 17, 19, 22 and claim 4, Rajarajan. Also refer to claim 53, Rajarajan*); collating the semantic information elements of the first entity with the semantic information elements of the at least one other entity (*see paragraphs 59 and 61-63, Rajarajan*); analyzing each pair of collated semantic information elements to determine at least one behavioral characteristic of the first entity in the relationship (*Rajarajan's design teaches how servers are checked to ensure they have proper interfaces with one another; see paragraphs 66-68, Rajarajan*).
9. With regards to Claim 9, the Rajarajan discloses the meta-data structure is provided in a form suitable for indicating at least one semantic element taken from the group including: a description, a range, a default value (*see paragraph 62 and it's associated table; Rajarajan*).

10. With respect to Claim 10, the Rajarajan discloses the step of generating meta-data for the first entity, the at least one characteristic is a characteristic of an interface of the entity, and wherein in the step of generating meta-data for the at least one other entity, the at least one characteristic is a characteristic of an interface of the at least one other entity (*Equivalent to data structures such as the database record set; see paragraph 38, Rajarajan. A set of records is equivalent to the claimed more than one meta-data providing a structure. In addition, various uses of data structures are supported within Rajarajan's design; see paragraphs 17, 19, 22 and claim 4, Rajarajan. Also refer to claim 53, Rajarajan*).
11. With respect to Claim 18, the Rajarajan discloses: generating at least one meta-data structure providing at least one semantic information element for each entity, wherein each said semantic information element describes a characteristic of an interface capability of one of said entities (*Equivalent to data structures such as the database record set; see paragraph 38, Rajarajan. A set of records is equivalent to the claimed more than one meta-data providing a structure. In addition, various uses of data structures are supported within Rajarajan's design; see paragraphs 17, 19, 22 and claim 4, Rajarajan. Also refer to claim 53, Rajarajan*); collating said meta-data structures such that each semantic information element corresponding to the initiator's interface capability is collated with a corresponding semantic information element corresponding to the responder's interface capability (*see paragraph 59, Rajarajan*); analyzing the

collated semantic information elements to determine the extent to which the initiator and the responder can generate a compatible interface; establishing in accordance with said analysis an interface between said initiator and said responder (*Rajarajan's design teaches how servers are checked to ensure they have proper interfaces with one another; see paragraphs 66-68, Rajarajan*).

Response to Arguments

Applicant's arguments filed March 7, 2008 have been fully considered but they are not persuasive. The following are the examiner's response to the applicant's arguments.

The first point of contention addressed by the applicant concerns the 101 rejection. The applicant has amended the latest claims and contends that the 101 issues have been overcome. The examiner disagrees. Claims 19 and 22 now feature "computer-readable medium" just as claim 20 previously had. However, "computer-readable medium" is not supported by the specifications. That is why new 101 and 112 rejections have been included to highlight this deficiency.

The second point of contention addressed by the applicant concerns the language, "generating an adaptive software interface." The applicant contends that the prior art is not applicable because such language is not literally cited with the art. The examiner disagrees. In response to applicant's argument that Rajarajan is nonanalogous art, it has been held that a prior art reference must either be in the field of

applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, the claimed invention is directed towards analyzing semantic information to establish the extent to which two networked entities are compatible and setting up an adaptive software interface between the two networked entities. In the same field of endeavor, the Rajarajan prior art teaches how servers' properties are checked to ensure they have proper interfaces with one another; see paragraphs 66-68; Rajarajan. In addition, the contended language, "generating an adaptive software interface," resides within the preamble of the claim. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

The applicant then asserts that the Rajarajan prior art is insufficient because the compatibility of claim 1 is still contextual semantic compatibility, not compatibility of interfaces. The examiner disagrees. First the applicant's claims fail to cite "contextual semantic compatibility." Second, the applicant's claims claim "networked entities." Such "entities" can be hardware or software, just like the Rajarajan art.

The final argument presented by the applicant focuses on the claimed "structured metadata providing at least one semantic information element describing a

characteristic of each said entity." The applicant contends that the Rajarajan prior art is not applicable because in Rajarajan's design, the semantic server holds the semantic metadata and the notation server holds the visual representation. The examiner again disagrees. The claims require just "structured metadata" to provide semantic data describing a network entity. "Structured metadata" is merely any data structure. As anyone know, if there exists data within a digital design (such as Rajarajan's design), such data inherently exists within a data structure. So, the claims really are claiming any data providing semantic information describing a network entity. Such data providing semantic information is taught by Rajarajan in at least paragraph 59 and 61-63.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AZIZUL CHOUDHURY whose telephone number is (571)272-3909. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Cardone can be reached on (571) 272-3933. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2145

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/A. C./

Examiner, Art Unit 2145

/Jason D Cardone/
Supervisory Patent Examiner, Art Unit 2145